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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/451,196	11/29/1999	RADESH MANIAN	081862.P149	8729

7590 03/16/2004

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EXAMINER

ZIA, SYED

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 03/16/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/451,196

Applicant(s)

MANIAN ET AL.

Examiner

Syed Zia

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-31 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to request for consideration filed on December 18, 2003 (Paper No. 13). Examiner acknowledges applicant request for applying changes made by AIPA of 1999, and correcting it accordingly. Original application contained Claims 1-31. Applicant previously amended Claims 1, 9, 17, and 25. Applicant left unchanged Claims 2-8, 10-16, 18-24, and 26-31. Therefore, presently pending claims are 1-31.

Response to Arguments

1. The arguments filed on December 18, 2003 (Paper No. 13) have been entered and made of record. Applicant's arguments have been fully considered but they are not persuasive because of the following reasons:

2. Regarding claim 1, 9, 17, and 25 applicants argued that the cited prior art (CPA) [Pei] does not disclose, "*dividing a hardware schedule table into N logical schedule tables, separating the N logical schedule tables*".

This is not found persuasive. CPA teaches and describes method consists of scheduling process that uses separate tables for available bit rate (ABR) traffic. Figs. 7A to 7D depict simplified portions of *dynamic scheduling* tables (hardware table) used for scheduling ABR type ATM cell transmission in accord with the embodiments of the invention. Specifically, one static table indexes VPCs (virtual path connections) and identifies high and low priority VCCs (virtual path

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connections) for CBR (constant bit rate) and VBR (variable bit rate) traffic. There is a separate, *dynamic* ABR table associated with each respective VPC. When the scheduler accesses a line of the static table for a given cell transmit time it first identifies a VPC assigned that slot for its use. The scheduler processes CBR and VBR traffic using VCC identifiers from the indexed line of the static table. The scheduler also access a dynamic ABR table for the indexed VPC to retrieve a link list and append that list to a work list associated with the VPC (Fig. 1, 7, and col.11 line 25 to col.17 line 37).

3. As a result, CPA does implement a system to schedule traffic in network using logical schedule tables.

4. Applicants clearly have failed to explicitly identify specific claim limitations, which would define a patentable distinction over prior arts.

The examiner is not trying to teach the invention but is merely trying to interpret the claim language in its broadest and reasonable meaning. The examiner will not interpret to read narrowly the claim language to read exactly from the specification, but will interpret the claim language in the broadest reasonable interpretation in view of the specification. Therefore, the examiner asserts that CPA does teach or suggest the subject matter broadly recited in independent Claims 1, 9, 17 and 25. Dependent claims 2-8,10-16, 18-24, and 26-31 are also rejected at least by virtue of their dependency on independent claims and by other reason set forth in the this office action (Paper No. 13).

Accordingly, rejections for claims 1-31 are respectfully maintained.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Pei et al. (U. S. Patent 6,272,109).

3. Regarding claims 1, 9, 17 and 25 Pei teaches and describes a system, product and method that relates to techniques and devices for scheduling asynchronous transfer mode (ATM) traffic, for different bit rate services assigned to virtual circuit connections within a plurality of virtual path connections, for transmission over an ATM link, comprising:

- dividing a hardware schedule table into N logical schedule tables, the N logical schedule tables being separated by table delimiters and operating independently of one another; and assigning an identifier in a scheduling table, the scheduling table being one of the N logical schedule tables, the identifier corresponding to a connection in the network (col. 5 line 5 to col. 7 line 18, and col.19 line 43 to col.20 line 13).

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4. Claims 2, 4, 10, 12, 18, 20 and 26 are rejected applied as above in rejecting claims 1, 9, 17 and 25. Furthermore, Pei

- each of the table delimiters corresponds to at least one unused entry in the hardware schedule table (Fig. 9 and col. 17 line 7 to line 38);

- determining if a first entry requested by the network for the identifier is occupied; and assigning the identifier to a second entry if the first entry is occupied, the second entry being available for occupancy (col. 4 line 9 to line 41).

5. Claims 3, 5, 11, 13, 14, 19, 21, 22 and 27 are rejected applied as above in rejecting claims 2, 4, 10, 12, 18, 20 and 26. Furthermore, Pei teaches and describes a system and method for transferring information through a communication medium and particularly, for scheduling the transmission of data packets across connections in a communication system, wherein:

- each of the N logical schedule tables corresponds to a class of service (col. 3 line 26 to line 45);

- assigning the identifier to the first entry if the first entry is available for occupancy (col. 5 line 57 to col. 6 line 7);

- assigning the identifier to a third entry if the second entry coincides with one of the table delimiters, the third entry being a next available entry found from a beginning of the scheduling table (col. 6 line 8 to line 19 and col. 18 line 15 to line 33);

- the scheduler assigns the identifier to a second entry if a first entry requested by the network for the identifier is occupied, the second entry being available for occupancy (col. 4 line 9 to line 41).

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6. Claims 6, 15, 23, and 28 are rejected applied as above in rejecting 5, 14, 22 and 27.

Furthermore, Pei teaches and describes a mechanism for traffic scheduling, comprising:

- assigning the identifier to a third entry if the second entry coincides with one of the table delimiters, the third entry being a next available entry found from a beginning of the scheduling table (col. 6 line 8 to line 19 and col. 18 line 15 to line 33);
- the network is an asynchronous transfer mode (ATM) network (col. 3 line 20 to line 25).

7. Claims 7, 16, 24 and 29 are rejected applied as above in rejecting 6, 15, 23 and 28.

Furthermore, Pei teaches and describes an ATM network and virtual circuit connection, wherein:

- the network is an asynchronous mode transfer (ATM) network (col. 3 line 20 to line 25);
- the identifier is a virtual channel identifier (col. 2 line 17 to line 39).

8. Claims 8 and 30 are rejected applied as above in rejecting 7 and 29. Furthermore, Pei teaches and describes:

- the identifier is a virtual channel identifier (col. 2 line 17 to line 39).

9. Claim 31 is rejected applied as above in rejecting 7 and 29. Furthermore, Pei teaches and describes an ATM processing device, comprising:

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- the network processor is a segmentation and reassembly processor (Fig. 3 and col. 8 line 23 to line 50).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Zia whose telephone number is 703-305-3881. The examiner can normally be reached on Monday - Friday 9:00 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SZ
March 10, 2004


AYAZ SHEIKH
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